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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,340	04/20/2004	Hiroyuki Ishida	Q81167	2587
23373	7590	10/04/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CARIASO, ALAN B	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
10/827,340	ISHIDA, HIROYUKI	
Examiner	Art Unit	
Alan Cariaso	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 7 and 13-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040420, 20041015</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 1, 3, 5 and 6 are objected to because of the following informalities:  
Claims 1, 3, 5 and 6 recite (first or second) light irradiation units, (first or second) lighting units, and the lighting unit, which all appear to be directed the same part but have inconsistent terms. Parts repeated should have consistent terms. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 6 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by DASSANAYAKE (US 5,550,716).
5. DASSANAYAKE discloses a headlamp comprising: at least one first light emitting unit (24) that is substantially rectangular (fig.2, col.2, lines 21-22) and faces forward (fig.2) and is shifted with respect to an optical axis (col.2, lines 29-32) of the headlamp (22) and at least one corresponding first projection lens (26) that inherently projects an image of light generated by said at least one first light emitting unit wherein said image would be inverted (producing the cutoff beam pattern, col.3, lines 1-10); further comprising a lens cover (28) that is translucent (col.3, line 11); wherein said at least one first light emitting unit (24) is shifted by at least being inclined at an angle ("29" in fig.2) with respect to a horizontal direction (27); wherein said angle (29) is about 15 degrees (col.2, lines 30-32); further comprising a second lighting system (any other of the four units 22-fig.2) at least one second light emitting unit (24, fig.2) that is rectangular (col.2, lines 21-22) and faces forward and is shifted upward (left side shown of 24 in fig.2) and is in line with the optical axis (34, fig.3) and a second corresponding projection lens (26) that inherently inverts the light image; further comprising a lens cover (28) having a plurality of vertically stripped diffusing lens units (col.3, lines 11-19) adjacent to at least one second projection lens (26, fig.3) of the second light system (20).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over DASSANAYAKE (US 5,550,716) in view of BARROS et al (US 6,926,432).

8. DASSANAYAKE discloses a headlamp that forms a light distribution pattern having a horizontal cutoff line (col.1, lines 36-40) comprising: a plurality of first light irradiation units (22, fig.2) and a plurality of second light irradiation units (represented by either 16 or 18, or the other set represented by 20, fig.2) that form at least part of the horizontal cutoff line or the entire light distribution pattern, each of the first and second light units (22,16,18) having: a substantially rectangular light emitter (24) facing forward extending in the horizontal direction (27), a projection lens (26) inherently projecting the light emitter inverted image, at least the second lighting units (18,22) include a second light source (24) that extends in an inclined direction at an angle (29) with respect to a horizontal direction (27) and therefore capable of producing an oblique cutoff line extended at an angle with respect to a horizontal direction (27). Though, DASSANAYAKE does suggest a proximal electric light source as the light emitter (col.2, lines 25-29), it not does disclose a semiconductor light emitting unit.

9. BARROS teaches at least one rectangular diode chip 34 (figs.29 and 32-G) with a lens optic (36) for the purpose of optimizing light emission (col.18, lines 55-56) producing one of plural shaped light distribution patterns (figs.30-31,32G) including a rectangular light projection or pattern (111, col.18, lines 47-65) projected from a vehicle. It would have been obvious to one having ordinary skill in the art at the time of the

invention to modify the headlamp system of DASSANAYAKE to include the type of semiconductor light emitting unit as taught by BARROS et al in order to optimized light emission and produce a rectangular light distribution pattern, making clear contrast at the edges of the pattern by efficiently projecting useful light from an efficient light source.

### ***Allowable Subject Matter***

10. Claims 7 and 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: None of the prior of record suggests: first and second types of the first light emitting unit having corresponding first projection lenses having corresponding first and second focal lengths, wherein said first focal length is greater than said second focal length; wherein said first lighting system is positioned below said second lighting system in said headlamp; at least a third light emitting unit that is substantially rectangular and faces forward and is shifted upward and rightward with respect to said optical axis.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. DU et al (US 6,945,672) show a square-rectangular diode chip (12') as a headlight, emitting light to a condensing or converging lens (24', fig.3) and a


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system of such-shaped plural LEDs (204, fig.8). HARBERS et al (US 6,406,172) show a three-unit head lighting system of semiconductor opto-electronics (11-14, fig.2) that produce different distribution patterns (figs.3A-4B). MAKITA et al (US 4,949,226) show an elongate shaped light source (filament 30) transverse to the optical axis of the projection headlamp, imaging an intermediate light pattern (P), fig.4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (571) 272-2366. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan Cariaso  
Primary Examiner  
Art Unit 2875

October 2, 2005, AC